

2005 FALL POTATO CHEMICAL USAGE

Eight fall producing States were included in the 2005 survey: Colorado, Idaho, Maine, Michigan, Minnesota, North Dakota, Washington, and Wisconsin. Nitrogen averaged 4.1 applications per field with a total of 180.3 million pounds applied to 99 percent of the fall potato acreage. Phosphate was applied to 98 percent of the fall potato acres, with a total of 132.5 millions pounds applied. A total of 145.4 million pounds of Potash were applied to 92 percent of the planted acreage. Sulfur recorded 41.3 million pounds applied to 72 percent of the acres planted.

The total pounds of all pesticides were down for fall potatoes in 2005 compared to 2003. Herbicides were applied to 92 percent of the fall potato acreage in 2005 in the 8 Program States. Metribuzin was the most widely applied herbicide, applied to 74 percent of the planted acreage treated, at a rate of 0.441 pounds per acre per crop year.

Of the insecticides covering 79 percent of the 2005 fall potato planted acreage, the three most commonly applied were Imidacloprid, Cyfluthrin, and Esfenvalerate and, 38, 29, and 27 percent, respectively.

Fungicide treatments were applied to 90 percent of the fall potato acreage in the Program States. Mancozeb was the most commonly used fungicide. It was applied to 61percent of the planted acres at a rate of 4.215 pounds per acre per crop year.

FALL POTATOES: Fertilizer Use by State, 2005 Percent of Acres Treated and Total Applied

State	Planted Acreage	Nitrogen		Phosphate		Potash		Sulfur	
	1,000 Acres	Percent	Mil. Lbs.	Percent	Mil. Lbs.	Percent	Mil. Lbs.	Percent	Mil. Lbs.
ID	325	100	72.9	99	56.9	92	40.0	82	21.7
MI	44	99	9.2	94	4.9	100	10.2	58	1.4
MN	46	100	8.2	100	5.0	81	7.7	55	0.7
ND	92	100	14.7	100	8.4	96	13.7	54	1.3
WI	68	100	17.9	99	9.1	99	20.5	72	4.1
Total 1/	845	99	180.3	98	132.5	92	145.4	72	41.3

1/ Refers to the 8 major potato states: CO, ID, ME, MI, MN, ND, WA, and WI.

FALL POTATOES: Frequency and Extent of Usage by Active Ingredient, Minnesota, 2005 1/

Active Ingredient	Area Applied	Applications	Rate per Application	Rate per Year	Total Applied
	Percent	Number	Lbs. per Acre	Lbs. per Acre	1,000 Pounds
Herbicides					
Linuron	8	1.0	0.820	0.820	3
Metribuzin	81	1.0	0.309	0.309	12
S-Metolachlor	28	1.0	1.029	1.029	13
Insecticides					
Esfenvalerate	39	1.7	0.014	0.024	2/
Imidacloprid	59	1.1	0.201	0.217	6
Thiamethoxam	13	1.3	0.040	0.050	2/
Fungicides					
Azoxystrobin	7	2.3	0.105	0.239	1
Chlorothalonil	83	9.9	1.065	10.506	399
Cymoxanil	15	1.0	0.094	0.094	1
Mancozeb	75	3.3	1.347	4.405	152
Mefenoxam	29	1.0	0.238	0.238	3
Metiram	3	2.1	1.082	2.304	4
Triphenyltin hydrox.	7	2.0	0.118	0.239	1
Zoxamide	6	1.5	0.158	0.241	1
Other Chemicals					
Diquat dibromide	22	1.5	0.343	0.526	5

1/ Planted acreage in 2005 for Minnesota was 46,000 acres.

2/ Total applied is less than 500 lbs.